
SR5

Netflex
Software Development Plan (Small Project)
Version 2.0

Netflix	Version: 2.0
Software Development Plan (Small Project)	Date: 11/Nov/23
NF-PPG11-V2.0	

Revision History

Date	Version	Description	Author
23/Oct/23	1.0	Initial Release	Nguyễn Tấn Lộc
29/Oct/23	1.1	Clarify the Project Plan: <ul style="list-style-type: none"> - Explain the project plan to key stakeholders and discuss its key components. - Define roles and responsibilities. - Develop a scope statement. - Develop the project baselines. - Create baseline management plans. → Write more details for each phase of the project.	Nguyễn Tấn Lộc, Đinh Quang Phong, Tăng Tường Thoại
11/Nov/23	2.0	Revise and update the Project Plan Added Risk Management section	Nguyễn Tấn Lộc, Phạm Quốc Duy

Netflex	Version: 2.0
Software Development Plan (Small Project)	Date: 11/Nov/23
NF-PPG11-V2.0	

Table of Contents

1. Introduction	4
<i>2. Project Overview</i>	<i>4</i>
<i>2.1 Project Purpose, Scope, and Objectives</i>	<i>4</i>
<i>2.2 Assumptions and Constraints</i>	<i>4</i>
<i>2.3 Project Deliverables</i>	<i>4</i>
<i>3. Project Organization</i>	<i>5</i>
<i>3.1 Organizational Structure</i>	<i>5</i>
<i>3.2 Roles and Responsibilities</i>	<i>5</i>
<i>4. Management Process</i>	<i>6</i>
<i>4.1 Project Estimates</i>	<i>6</i>
<i>4.2 Project Plan</i>	<i>6</i>
<i>4.2.1 Phase and Iteration Plan</i>	<i>6</i>
<i>4.2.2 Releases</i>	<i>8</i>
<i>4.2.3 Project Schedule</i>	<i>9</i>
<i>4.3 Project Monitoring and Control</i>	<i>10</i>
4.3.1 Reporting	10
4.3.2 Risk Management	11
4.3.3 Configuration Management	11

Netflex	Version: 2.0
Software Development Plan (Small Project)	Date: 11/Nov/23
NF-PPG11-V2.0	

Software Development Plan (Small Project)

1. Introduction

This is the Software Development Plan for a small project named Netflex, a movie-streaming web application. This document aims to provide information on the overview of the project, the project organization, and the project's management process.

2. Project Overview

2.1 Project Purpose, Scope, and Objectives

The objective of this project is to develop a web application designed to provide a diverse range of on-demand streaming through a user-friendly platform, featuring subscription plans that cater to various preferences, from Free to Premium. Users will have effortless access to and enjoyment of movies based on their selected subscription plan.

2.2 Assumptions and Constraints

- The Project's anticipated deadline is set for early December 2023
- This is a zero-budget project
- The project contains 5 people, any group member change is not allowed
- The project is set to be finished within 5 sprints

2.3 Project Deliverables

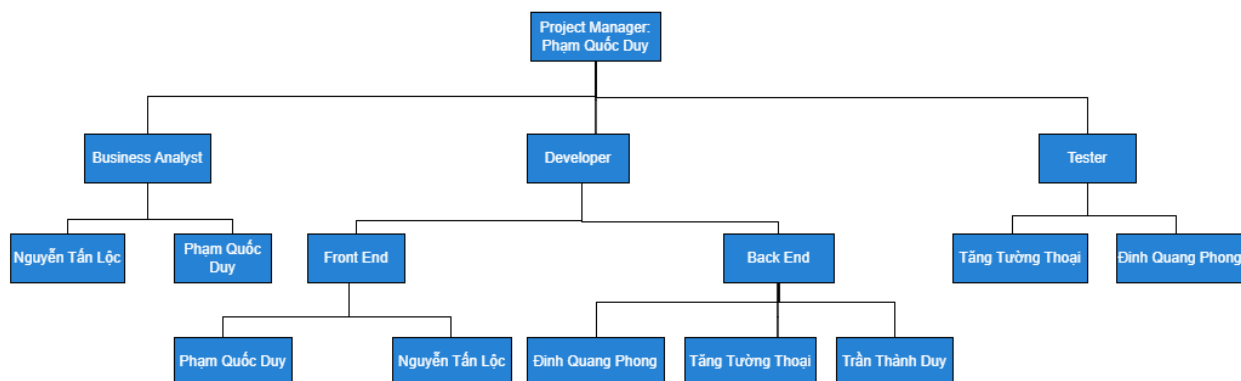
The project will yield the following deliverables:

1. Use Cases Specification (expected date of delivery: 12/Nov/23)
2. Software Architecture Document (expected date of delivery: 12/Nov/23)
3. User Interface Prototype (expected date of delivery: 12/Nov/23)
4. Database Design (expected date of delivery: 12/Nov/23)
5. Test Cases (expected date of delivery: 10/Dec/23)
6. Test Summary (expected date of delivery: 10/Dec/23)
7. Project Presentation (expected date of delivery: 24/Dec/23)

Netflex	Version: 2.0
Software Development Plan (Small Project)	Date: 11/Nov/23
NF-PPG11-V2.0	

3. Project Organization

3.1 Organizational Structure



3.2 Roles and Responsibilities

Person	Role
Phạm Quốc Duy, Project manager, Developer	Project management, planning, risk management. Program and develop web interface construction, optimize interface performance, and ensure cross-platform compatibility for the front end.
Trần Thành Duy, Developer, Business Analyst	Analyzing requirements, identifying appropriate solutions and contingency plans. Handling data, managing user access and permissions, and backend APIs and communication.
Nguyễn Tấn Lộc, Developer, Business Analyst	Requirements analysis, identifying appropriate solutions and backup solutions. Design user interface and user experience, program and develop web interface construction, and user interaction.
Tăng Tường Thoại, Developer, Tester	APIs and communication, security, server resource management of the backend. Quality control and testing, identifying errors and issues, and writing tests for each phase in parallel with the core code.
Đinh Quang Phong, Tester, Developer	Security testing, using software for automated testing, writing parallel tests alongside the main code. Testing security, data handling, user management, and access control in the backend.

Netflix	Version: 2.0
Software Development Plan (Small Project)	Date: 11/Nov/23
NF-PPG11-V2.0	

4. Management Process

4.1 Project Estimates

Phase	Sprint	Start date
Inception	1	Oct 15, 2023
Elaboration	2	Oct 29, 2023
Construction 1	3	Nov 12, 2023
Construction 2	4	Nov 26, 2023
Construction 3	5	Dec 10, 2023

4.2 Project Plan

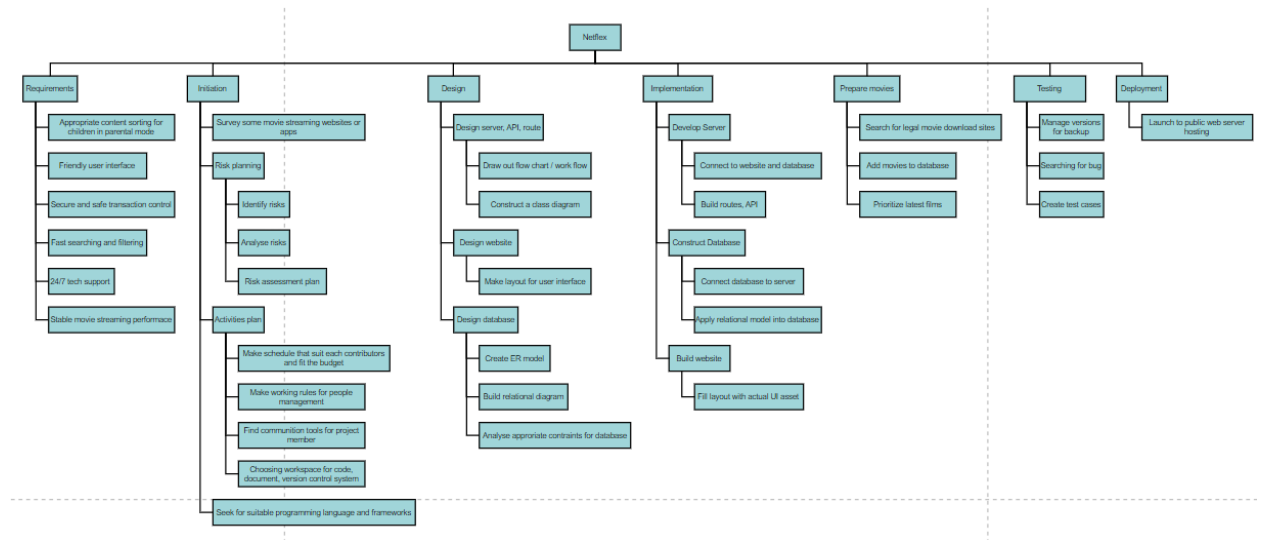
4.2.1 Phase and Iteration Plan

Phase name	Start date	End date	Overall objective
Inception	15/Oct/23	29/Oct/23	<ul style="list-style-type: none"> Project scope, cost estimate and risk plan for Netflix Workspace and communication tools for group member Programming language, frameworks and hosting service for the movie website
Elaboration	29/Oct/23	12/Nov/23	<ul style="list-style-type: none"> Website layout structure General workflow, API routes for the system Database relational model for film,user and admin
Construction	12/Nov/23	24/Dec/23	<ul style="list-style-type: none"> Fully functional movie streaming website that satisfies all requirements Some prepared movies on database Friendly user interface on Netflix's site

Sprint	Start date	End date	Objective
Sprint 1	15/Oct/23	29/Oct/23	Planning phase
Sprint 2	29/Oct/23	12/Nov/23	Designing phase

Netflex	Version: 2.0
Software Development Plan (Small Project)	Date: 11/Nov/23
NF-PPG11-V2.0	

Sprint 3	12/Nov/23	26/Nov/23	Develop phase
Sprint 4	26/Nov/23	10/Dec/23	Testing phase
Sprint 5	10/Dec/23	24/Dec/23	Delivering phase



[Link for more detailed insights](#)

Netflix	Version: 2.0
Software Development Plan (Small Project)	Date: 11/Nov/23
NF-PPG11-V2.0	

4.2.2 Releases

SOFTWARE'S VERSION RELEASE PLAN		TARGET DATE
1	Prototype (In Figma Design)	09/11/2023
2	<p>Demo (First version). This version brings the basics of all features that are all functional and can be viewed only. For instance,</p> <p>User account functionality:</p> <ol style="list-style-type: none"> 1. Create an account. 2. Forgot password functionality. <p>Movie categorization:</p> <ol style="list-style-type: none"> 1. Given 2 types of movies for categorization. <p>Movie Searching:</p> <ol style="list-style-type: none"> 1. Basic searching for movie names (given a string and return movie's names, which the prefix is matched with the input string, case sensitivity isn't accounted for). <p>Data:</p> <ol style="list-style-type: none"> 1. Static, pre-configured data is necessary. <p>Movie watching:</p> <ol style="list-style-type: none"> 1. Should have basic facilities for this feature (include API, basic UI view). 	27/11/2023
3	<p>Beta (Version 1.0 with the same feature of demo enhanced with dynamics data and the first version of movie watching) This version allows users to fully authenticate using various types of logging. For instance,</p> <p>User account functionality:</p> <ol style="list-style-type: none"> 1. Create account 2. Captcha Verification 3. Forgot password functionality 4. Create an account and log in with third-party services (Google, Facebook, ...). For the current scope, only a third party will be chosen for implementation, which is Google <p>Movie categorization:</p> <ol style="list-style-type: none"> 1. Able to search with a few movie categories (horror, romantic, love, cartoon, drama, scientific,...etc). The result shall be the movie metadata represented by cards in tabular format. <p>Movie Searching:</p> <ol style="list-style-type: none"> 1. The application shall be able to give the result of searching movies by their names (searching required to ignore cases, return a result if the given string is the movie's name prefix) 2. Suggest, completing the given string based on system movie names that match with the given string. <p>Data:</p> <ol style="list-style-type: none"> 1. Shall be able to retrieve from database and API 2. Show to user basic information including user's information, movie information, trendings,...etc <p>Movie watching:</p> <ol style="list-style-type: none"> 1. Shall be able to present to the user the basics of the video (resolution requirement is not considered). 	04/12/2023

Netflex	Version: 2.0
Software Development Plan (Small Project)	Date: 11/Nov/23
NF-PPG11-V2.0	

4	<p>Beta (Version 1.x.x) This version finalizes all core functionalities of the Netflex application. For instance,</p> <p>User account functionality:</p> <ol style="list-style-type: none"> 1. Fix bugs, testing, and complete functionality. 2. Generate tests and apply unit testing. <p>Movie categorization:</p> <ol style="list-style-type: none"> 1. Fix bugs, testing, and complete functionality. 2. Generate tests and apply unit testing. <p>Movie Searching:</p> <ol style="list-style-type: none"> 1. Fix bugs, testing, and complete functionality. 2. Generate tests and apply unit testing. <p>Data:</p> <ol style="list-style-type: none"> 1. Fix bugs, testing, and complete functionality. 2. Generate tests and apply unit testing. <p>Movie watching:</p> <ol style="list-style-type: none"> 1. Fix bugs, testing, and complete functionality. 2. Generate tests and apply unit testing. 	11/12/2023
---	--	------------

4.2.3 Project Schedule

We are using Google Sheet for managing and scheduling work in addition with Trello

For more details:

<https://docs.google.com/spreadsheets/d/1ZhOMqEEIS5CDox-cI3S94a3KAoHkEdznKar-v8bk2a0/edit?usp=sharing>

4.2.3.1. Sprint 1

1	2	3	SPRINT	TASK	START DATE	END DATE	ASSIGN	OCTOBER																				
								WEEK1							WEEK2													
								16	17	18	19	20	21	22	23	24	25	26	27	28	29	30						
4				Software Specifications and Functionalities	16/Oct/23	21/Oct/23	<div>Nguyễn Tấn Lộc</div>																					
5				Software Specifications and User-flow	16/Oct/23	21/Oct/23	<div>Phạm Quốc Duy</div>																					
6				Proposing framework and libraries, functionalities	16/Oct/23	21/Oct/23	<div>Trần Thành Duy</div>																					
7				Proposing framework and libraries, functionalities	16/Oct/23	21/Oct/23	<div>Tăng Tường Thoại</div>																					
8				Software Specifications	16/Oct/23	21/Oct/23	<div>Đinh Quang Phong</div>																					
9			SPRINT 1	Finding hosting service platform & movie database API	16/Oct/23	21/Oct/23	<div>Nguyễn Tấn Lộc</div>																					
10				Complete project overview and intro of Project Plan	22/Oct/23	27/Oct/23	<div>Phạm Quốc Duy</div>																					
11				Fill the Vision Document with as much information as possible	22/Oct/23	27/Oct/23	<div>Trần Thành Duy</div>																					
12				Wrap up framework and libraries for back end	22/Oct/23	27/Oct/23	<div>Tăng Tường Thoại</div>																					
13				Complete section 3 and 4.3 of Project Plan	22/Oct/23	27/Oct/23	<div>Đinh Quang Phong</div>																					
				Complete section 4.2 of Project Plan	22/Oct/23	27/Oct/23																						
				Concluce server hosting service & movie hosting API	22/Oct/23	27/Oct/23																						
				Complete section 4.2 of Project Plan	22/Oct/23	27/Oct/23																						

4.2.3.2. Sprint 2

SPRINT	TASK	START DATE	END DATE	ASSIGN	NOVEMBER															
					WEEK3								WEEK4							
					30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14
SPRINT 2	Project Plan Revise	01/Nov/23	11/Nov/23	Nguyễn Tấn Lộc																
	Vision Document Revise	01/Nov/23	11/Nov/23	Trần Thành Duy																
	Draw UI - Home pages composite with searching view	30/Oct/23	06/Nov/23	Phạm Quốc Duy																
	Draw UI - Watching movie pages	30/Oct/23	04/Nov/23	Nguyễn Tấn Lộc																
	Draw UI - Login pages including forgot password	30/Oct/23	04/Nov/23	Trần Thành Duy																
	DBMS - Design relational data model for the system	30/Oct/23	07/Nov/23	Đinh Quang Phong																
	Documents - Use case model	06/Nov/23	11/Nov/23																	
	Documents - Use case specifications	06/Nov/23	11/Nov/23																	
	Documents - Planning Meeting	30/Oct/23	30/Oct/23	Phạm Quốc Duy																
	Documents - Weekly Report	03/Nov/23 & 10/Nov/23	03/Nov/23 & 10/Nov/23	Tăng Tường Thoại																
	</																			

Netflix	Version: 2.0
Software Development Plan (Small Project)	Date: 11/Nov/23
NF-PPG11-V2.0	

4.2.3.3. Sprint 3

SPRINT	TASK	START DATE	END DATE	ASSIGN	NOVEMBER										
					WEEK5					WEEK6					
					12	13	14	15	16	17	18	19	20	21	22
SPRINT 3	Documents - Revise use case model	13/Nov/23	15/Nov/23												
	Documents - Revise use case specifications	13/Nov/23	15/Nov/23												
	Documents - Define software architecture	13/Nov/23	18/Nov/23												
	Documents - Class diagram design	13/Nov/23	18/Nov/23												
	Implementation - Basic UI component for Home page	13/Nov/23	22/Nov/23												
	Implementation - Basic UI component for watching movie page	13/Nov/23	22/Nov/23												
	Implementation - Basic UI component for logging page	13/Nov/23	22/Nov/23												
	Implementation - Basic BE implementation (having RESTApi for functional feature)	13/Nov/23	22/Nov/23												
	DBMS - Data initialization	20/Nov/23	23/Nov/23												
	DBMS - Connection to BE	23/Nov/23	26/Nov/23												
	Documents - Planning Meeting	13/Nov/23	13/Nov/23												
	Documents - Weekly Report	18/Nov/23 & 24/Nov/23	18/Nov/23 & 24/Nov/23												
	Documents - Review Meeting	25/Nov/23	25/Nov/23												

4.2.3.4. Sprint 4

SPRINT	TASK	START DATE	END DATE	ASSIGN	DECEMBER									
					WEEK7					WEEK8				
					26	27	28	29	30	1	2	3	4	5
SPRINT 4	Revise Software Architecture Document	27/Nov/23	28/Nov/23											
	UI - Revise Figma UI design	27/Nov/23	03/Dec/23											
	Implementation - Home page UI implementation complete at basic level	27/Nov/23	03/Dec/23											
	Implementation - Movie watching UI complete at basic level	27/Nov/23	03/Dec/23											
	Implementation - Logging page UI complete at basic level	27/Nov/23	03/Dec/23											
	Implementation - Watching movie functional	27/Nov/23	03/Dec/23											
	Implementation - Categorization feature complete at basic level	27/Nov/23	03/Dec/23											
	Implementation - Searching feature complete at basic level	27/Nov/23	03/Dec/23											
	Implementation - Logging feature completion	27/Nov/23	03/Dec/23											
	Documents - Planning Meeting	27/Nov/23	27/Nov/23											
	Testing - Basic testing case must be prepared	04/Dec/23	08/Dec/23											
	Documents - Weekly Report	02/Dec/23 & 08/Dec/23	02/Dec/23 & 08/Dec/23											
	Documents - Review Meeting	09/Dec/23	09/Dec/23											

4.2.3.5. Sprint 5

SPRINT	TASK	START DATE	END DATE	ASSIGN	DECEMBER																							
					WEEK8					WEEK9					WEEK10													
					5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
SPRINT 5	Build a PowerPoint presentation	11/Dec/23	17/Dec/23	▼																								
	Write a report for the project	11/Dec/23	17/Dec/23	▼																								
	Record a demo video	11/Dec/23	17/Dec/23	▼																								
	Testing plan preparation	11/Dec/23	13/Dec/23	▼																								
	Testcase preparation	14/Dec/23	16/Dec/23	▼																								
	Valid, bug fixing, accomplish Netflix	17/Dec/23	23/Dec/23	▼																								
	Netflix release V1.0	22/Dec/23	23/Dec/23	▼																								
	Documents - Planning Meeting	11/Dec/23	11/Dec/23	▼																								
	Documents - Weekly Report	15/Dec/23 & 22/Dec/23	15/Dec/23 & 22/Dec/23	▼																								
	Documents - Review Meeting	23/Dec/23	23/Dec/23	▼																								

4.3 Project Monitoring and Control

4.3.1 Reporting

- Weekly Scrum Meetings
- Sprint Planning Meetings
- Sprint Review Meetings
- Progress tracking on Trello

Netflex	Version: 2.0
Software Development Plan (Small Project)	Date: 11/Nov/23
NF-PPG11-V2.0	

4.3.2 Risk Management

Risk ID	Risk Description	Probability	Impact	Priority	Mitigation Strategy or Contingency Plan
1	Technical difficulties with the website (e.g., server crashes, slow loading times)	Medium	High	High	Regularly monitor and maintain the website to ensure it's running smoothly. Have a backup server ready in case of a server failure.
2	Legal issues related to copyright infringement	Low	High	High	Ensure all content is properly licensed or falls under fair use. Consult with a legal expert if necessary. (Consult with teacher)
3	Data breaches leading to loss of user information	Low	High	High	Implement strong security measures and regularly update them in order to ensure information safety and security.
4	Issues relating to tools comprehension	High	Medium	High	Thoroughly go through the documentations/tutorials in order to understand the tools, technologies, frameworks...etc
5	Team coordination issues due to the size of the team	High	Medium	Medium	Regular team meetings and clear communication channels.
6	Poor user interface leading to a decrease in user satisfaction	Medium	Medium	Medium	Conduct user testing and gather feedback to improve the interface.
7	Slow on task's deadline due to heavy workload	Low	Medium	Medium	The process of development should be pushed in order to guarantee the product is released on time according to the Release Plan

4.3.3 Configuration Management

- Google Drive: for storing submissions, project-related documents, reports from weekly scrum meetings, sprint planning meetings, and sprint review meetings
- Github: managing source code and project-related documentations.